Communicable Disease UPDATE

Newsletter of the Bureau of Communicable Disease Control, Massachusetts Department of Public Health Vol. 9, No.2 Summer 2001

A Defining Time in the Global Tuberculosis Pandemic

Hippocrates said, "Healing is a matter of time and it is also, a matter of opportunity." This wisdom is still relevant in 2001. Today, the majority of people sick with tuberculosis (TB) in the world do not have access to adequate treatment. Currently, 71% of the TB cases in Massachusetts occur among people from high-prevalence countries. The progress toward the elimination of TB in Massachusetts will depend on how effectively TB is managed and controlled worldwide. Efforts are underway to improve access to treatment globally and develop more effective drugs to treat TB.

Many people in industrialized countries (where only 3% to 5% of the world's TB cases occur) believe TB is an ancient disease that is no longer a threat. TB, historically known as the "captain of death", the "great white plague" and "consumption", continues to be one of the deadliest diseases today. According to the World Health Organization, "someone in the world dies of TB every 10 seconds, and only one in five people sick with TB receive adequate treatment." TB is the leading cause of death among young women and people with HIV infection. More than 250,000 children die of TB every year. One third of the world population is at-risk with latent TB infection and one additional person is newly infected every second. Worldwide, cases of drug-resistant, often incurable TB, threaten the progress made in managing, controlling and reducing the incidence of TB.

In some areas of the world, there has been a four-fold increase in the incidence of TB and cure rates have declined from 90% to 50%. These developments are due, in part, to the lack of resources and coinfection with HIV and TB. The TB case rate in some African countries increased 20% from 1997 to 1999. Many countries do not have adequate drugs, laboratory supplies or well-trained health care workers. Shortages of drugs and disruption in therapy can lead to drug-resistant TB, which is difficult to treat, and requires longer and more expensive treatment. There has not been a major new treatment developed for TB in the past 30 years, compounding the problem.

The Global Alliance for TB Drug Development, consisting of 25 professional organizations, was formed to respond to the critical need for newer TB drugs that are accessible. The Global Alliance will function as a not-for-profit research and development partnership to accelerate the development of new, effective and inexpensive TB drugs. Members of the Alliance hope the new drugs will be readily available, will shorten the duration of treatment, and improve the treatment for latent TB infection and multi-drug resistant TB. Current treatment for nonresistant TB consists of a 6-month regimen. Additional resources are needed to monitor and provide long-term treatment. The Alliance hopes to produce new drugs to reduce treatment time by 50% and ensure that the "opportunity to heal" can be accessed by everyone.

Boston Hosts Cultural Orientation Trainers

Most refugees receive a brief cultural orientation training overseas prior to departing for the United States. The orientation may touch upon issues such as housing, employment, education, health, rights and responsibilities, and cultural adjustment. Trainers are challenged to present an accurate depiction of life in the U.S. when the details vary greatly between states and local communities and the orientation itself may be as short as four hours.

Boston was among the cities that recently hosted cultural orientation trainers as part of a program that is designed to increase understanding of the domestic side of resettlement. Trainers from Damascus, Syria and Istanbul, Turkey spent a half-day with the Refugee and Immigrant Health Program during their three days in Boston. The learning was bi-directional. The Massachusetts refugee health assessment and its role in resettlement were presented. A lengthy discussion on tuberculosis (TB) testing and treatment was particularly useful in pointing out the need for clear and consistent messages for refugees. Overseas, refugees are screened for active infectious TB. Those who are not placed on a

continued on page 6

Inside

Epidemiology

West Nile Virus Update

On April 24, 2001, the Massachusetts Department of Public Health (MDPH) released the 2001 West Nile Virus (WNV) Surveillance and Control Plan for Massachusetts to the public. This plan outlines recommendations for dead bird reporting, mosquito and human surveillance, communication of surveillance data, and the use of personal protection methods and pesticides.

While most dead birds will not be collected and tested for WNV, keeping track of their locations will play an important role in determining the level of human risk in a particular area. This year, local health officials and the public should report dead birds to the MDPH WNV Information Line at **1-866-MASS-WNV (1-866-627-7968)**. When a dead bird is needed for testing, MDPH staff will notify the caller and coordinate with local health officials to arrange for the safe collection and transport of the bird to the State Laboratory Institute (SLI) for WNV and eastern equine encephalitis virus (EEEV) testing.

Fixed mosquito trap sites will be located in communities that had evidence of significant WNV activity last year. In addition, mosquitoes collected from long-term fixed trap sites in the EEE high-risk areas of Southeastern and Eastern Massachusetts will be tested for EEEV and WNV. MDPH will also increase mosquito collection in areas that demonstrate high dead bird density.

MDPH will utilize an enhanced passive surveillance system for human cases of WNV by providing health-care providers with information on mosquito-borne diseases and regularly reminding them of the need to report suspect cases of encephalitis, meningoencephalitis and meningitis of potential viral etiology. Specimens from suspect cases will be tested for EEEV and WNV at SLI. In any area of Massachusetts that exhibits evidence of increased WNV activity, active surveillance will be initiated and conducted by telephone, alerting hospital infection control practitioners in the affected area. Health care providers should report suspect cases to the MDPH WNV Information Line at 1-866-MASS-WNV (1-866-627-7968).

MDPH will communicate surveillance data by posting daily results to the MDPH web site at <www.state.ma.us/dph/>. This site will contain WNV educational materials, the 2001 WNV Surveillance and Control Plan, and detailed information on ways to limit exposure to mosquitoes and maps. Additionally, official press releases, local community information and information for providers will be available at this site. The MDPH WNV Information Line will also provide general WNV information, personal protection recommendations and information on pesticides, throughout the season.

Picnics, Barbecues, *E. coli*?

It's summertime, which means picnics, parties, and barbecues. For the Massachusetts Department of Public Health (MDPH), summertime also means an increase in *E. coli* O157:H7 cases. Since 1982, *E. coli* O157:H7 has been recognized as an important cause of bloody diarrhea. Outbreaks have been linked to contact with farm animals and consumption of undercooked ground beef, unpasteurized apple juice/cider and contaminated water. The young and old are usually more severely ill when infected with *E. coli* O157:H7, and infection in young children may lead to complications such as hemolytic uremic syndrome (HUS).

Steps to prevent *E. coli* O157:H7 infection include:

- Wash your hands thoroughly with soap and water before eating or preparing food, after using the toilet, and after changing diapers.
- Make sure that animal-derived food products do not contaminate foods served raw (such as vegetables).
- Wash fruits and vegetables thoroughly.
- Cook all ground beef and hamburgers thoroughly.
- Drink only pasteurized milk, juice, and cider.

For more information on reporting and investigating cases of *E. coli* O157:H7 and HUS, please refer to the MDPH's *Guide to Surveillance and Reporting*, now available online at <http://www.state.ma.us/dph/cdc/gsrman/Gsr.htm>.

Multi-drug Resistant *Salmonella* Newport Infection in Massachusetts

Over the past two years, sporadic illness due to Salmonella Newport infection has increased in Massachusetts. During this time, there has also been an increase in multi-drug resistant (MDR) Salmonella Newport infections. These MDR cases are not linked geographically and are dispersed over time; therefore, a point-source exposure is unlikely.

One important discovery in the investigation of this increase is that cattle appear to be a reservoir for human infection. Although other reservoirs may exist, clusters of the same strain of MDR S. Newport have been detected among dairy cattle in Massachusetts and Vermont. Although direct farm exposure was identified as a strong risk factor, this only explained a small portion of the reported human cases. A more likely explanation is that people are getting exposed through food sources such as undercooked beef and raw milk or raw milk products. MDR S. Newport has been isolated from ground beef in other states and a recent outbreak of this strain was caused by cheese made from unpasteurized milk. Pasteurization and proper cooking will kill this organism.

continued on page 8

Chlamydia Screening in County Jails in Massachusetts

The Division of STD Prevention received funding from the CDC to screen for chlamydia infections at county jails. Screening began in February 1999 at the Hampden County Correctional Center (HCCC) in Ludlow and in March 1999 at the Nashua Street Jail in Boston.

Initiating screening required evaluation of intake, testing and courier procedures. The STD Laboratory had to prepare for the increased testing volume. Included in the laboratory preparations was familiarization with the use of urine as the clinical specimen. The use of urine increased cooperation of inmates and decreased time to collect specimens.

The major issue for the jails was to ensure that every person would be seen within 24 hours of admission. Most intakes are performed between 3-11 PM. A nurse was scheduled to work the second shift at one of the jails to ensure that the majority of people would be seen at admission. This nurse had received STD training from the Region I STD/HIV Prevention Training Center. It was also important the courier delivered specimens to the laboratory early enough to ensure processing before the end of the workday. However, it was difficult for the courier to enter the jails and get to the Health Service Units. This problem was resolved when one jail agreed to place a small (1.5 cubic feet) refrigerator in the Administration Office, located outside the secured area of the jail. All specimens were brought to the refrigerator at least once each day. Pick-ups and deliveries became very easy to accomplish.

Summary of All Testing Done in Two Massachusetts Jails, 1999-2000

		Hampden County			*Suffolk County*		
Year	*Gender*	*Pos(%)*	*Neg*	*Total*	*Pos(%)*	*Neg*	*Total*
1999	Female	15(5.2)	276	291	25(3.5)	682	707
	Male	117(6.1)	1810	1927	1(10.0)	9	10
2000	Female	12(8.3)	259	271	43(4.3)	961	1004
	Male	113(5.2)	2055	2168	75(7.0)	998	1073

The majority of clients were asymptomatic. It is curious that the prevalence of infection among women was higher in western Massachusetts while the opposite was true among the men. We will continue testing until there are sufficient numbers to draw valid conclusions.

County jails are a good place to conduct STD screening. We shall continue to test at these two sites and seek the means to begin testing in other county jails.

STD/HIV Staff Trainings

The Division of STD Prevention is currently concluding a series of five trainings for staff of HIV/AIDS Bureau-funded community agencies who provide education and outreach services to clients and in the community.

The curriculum, a collaborative effort with the HIV/AIDS Bureau, was designed as a one-day intensive course. It covers psychosocial issues, epidemiology, transmission and treatment, and STD communication, counseling and referral skills.

Each of the six trainings focused on the needs of staff providing services to a particular group, including adolescents, women, men who have sex with men, injection drug users and Spanish speaking clients. The group for Spanish speaking staff and clients was conducted in Spanish.

Feedback from these trainings highlighted the value of both the content and the networking opportunities they offered. For more information about education programs offered by the Division of STD Prevention, call our main number at 983-6940 and ask to speak with the Director of Education.

Immunization

No Shortage of Td Vaccine in Massachusetts

There have been a number of recent reports about a temporary shortage of adult tetanus and diphtheria toxoids (Td) and tetanus toxoid (TT) in the United States because of decreased production of these vaccines. There is now only one remaining national private manufacturer of tetanus-toxoid containing products for adults, Aventis Pasteur.

- Please note that the University of Massachusetts Biologic Laboratories manufactures Td vaccine for use in this state. Therefore, there is no shortage of Td vaccine in Massachusetts and prioritization to higher risk individuals is not necessary in Massachusetts.

- Also please note that the Centers for Disease Control (CDC) and the Massachusetts Immunization Program (MIP) do not recommend the use of DTaP in place of Td. DTaP in the United States is currently only licensed for use in individuals < 7 years of age. Pediatric formulations of DTaP contain a greater concentration of diphtheria toxoid than is found in adult formulations of Td vaccine, and have the potential to result in more severe local reactions when used in adults.

If you are currently enrolled in the Massachusetts Immunization Program/Vaccines For Children Program, you may order free, state-supplied Td vaccine from your local vaccine distributor. If you aren't enrolled and would like to order Td vaccine, please call the MIP's Vaccine Management Unit at (617) 983-6828. If you have any questions regarding DTaP or Td vaccine, please call the MIP at (617) 983-6800 or toll free at (888) 658-2850.

Adult Immunization Awards

The following individuals and organizations were recognized at the 6th Annual Massachusetts Adult Immunization Conference on April 25, 2001 for their dedication and innovations in assuring access to immunizations for adults in Massachusetts:

Anne Marie Jette, RN, BSN, of Jewish Healthcare, Inc.
Massachusetts Association of Public Health Nurses
Anna Bissonnette, RN, of Boston Medical Center
Donna DiMartino, RN, MSN, of SPARC
Douglas Shenson, MD, MPH, of SPARC

Immunization Requirements for Preschool and "K0" programs in Public School Systems

The Massachusetts Immunization Program (MIP) has been receiving questions concerning clarification of the immunization requirements for entry into a preschool program or a "K0" program (105 CMR 220.500) offered by public school systems, which are not regulated by the Office of Child Care Services. While not all school systems have these programs, they are increasing in number. The following vaccines are required for entry into preschool or "K0" program, unless there is a medical exemption signed and dated by a physician, or a religious exemption signed by the parent/guardian.

Immunization Requirements for Preschool and "KO" Programs in Public School Systems

Vaccine	*No. of Doses Required*
DTaP	$\geq$ 4
Polio	$\geq$ 1
MMR	1
Hep B	3
Varicella	1 dose or a reliable history of disease. A reliable history of chickenpox is defined as: 1) physician interpretation of parent/guardian description of chickenpox; 2) physician diagnosis of chickenpox; or 3) serologic proof of immunity

School health programs should have in place protocols for reassessing immunization status for the DTaP, Polio, and MMR requirements when a child moves from a K0 or preschool program to K1. They should also have a system for tracking students with "temporary" medical exemptions to ensure they receive their final doses in the series for these vaccines.

Remember, for children in K1 or K2, regardless of age, the requirements are $\geq$ 5 doses of DTaP, $\geq$ 4 doses of polio vaccine, 2 doses of MMR, 3 doses of Hep B, and 1 dose of varicella or reliable history of disease.

Please feel free to call the MIP at (617) 983-6800, or toll free at (888) 658-2850, if you need further clarification or assistance.

Tetanus Prophylaxis in Wound Management

You are an emergency department (ED) doctor at a Massachusetts hospital. A 65-year old woman is brought into the ED. She has a bandage on her forearm that upon removal, reveals a deep laceration that still contains some soil. When asked about her wound, she reports that earlier in the day she received her injury while getting gardening tools out of the garage, lacerating her arm on a dirty shovel.

You ask if she has ever been vaccinated against tetanus. She mentions that her husband is a WWII veteran and had received tetanus vaccine in the past, but she has not. You remember a memo indicating that there is currently a shortage of tetanus diphtheria (Td) vaccine in the United States (but not in Massachusetts). What do you do? Is there a risk to others? What treatment and/or control measure should be implemented?

Background

Tetanus is a disease that is caused by a toxin produced by the bacterium, *Clostridium tetani*, a spore-forming organism that is ubiquitous in the environment. The disease has become rare in the United States, because of the widespread use of tetanus vaccine. Adults should make sure that they have had a primary series of $\geq$ 3 doses of tetanus-containing vaccine followed by a booster dose of Td vaccine every 10 years. Almost all reported cases of tetanus are in persons who have either never been vaccinated, or who completed a primary series, but have not had a booster in the preceding 10 years. Injuries such as puncture wounds, lacerations, and abrasions account for over half of the reported cases. However, only 40% of cases with these injuries sought medical attention and only about 40% of those received the appropriate treatment.

What do you do now?

There is no person-to-person transmission of tetanus, so there is no risk to contacts of people with tetanus –prone wounds or tetanus itself. You clean and flush the wound to remove any remaining soil. Since the case does not have documentation of immunization against tetanus and the wound was contaminated with soil, her immunoprophylaxis will include 250 U of Tetanus Immune Globulin (TIG) and 0.5 cc of Td vaccine. TIG confers temporary passive immunity, while the body's immune system responds to the Td toxoids.

The following table should be used to determine appropriate wound management.

Tetanus Prophylaxis in Wound Management

	Clean, minor wounds		*All other wounds (1)*	
Vaccination History	**Td (2)**	**TIG**	**Td (2)**	**TIG (3)**
Unknown or < 3 doses	Yes	No	Yes	Yes
≥ 3 doses	No (4)	No	No (5)	No

[1] Such as, but not limited to, wounds contaminated with dirt, feces, soil, and saliva; puncture wounds; avulsions; and wounds resulting from missiles, crushing, burns, and frostbite.
[2] Use DTaP or DT for children < 7 years of age.
[3] TIG dose = 250 U
[4] Yes, if > 10 years since last dose.
[5] Yes, if > 5 years since last dose.
(Adapted from the American Academy of Pediatrics, *2000 Red Book*)

Since she has no documentation of having received a primary series, this first dose of Td vaccine can serve as the initiation of the immunization series. The next dose of Td vaccine is given $\geq$ 4 weeks after the first dose and the third dose $\geq$ 6-12 months after the second dose. This occasion should also be used as an opportunity to evaluate the Td status of any household members and initiate the primary series or give a booster dose of Td vaccine, if indicated.

As for the current shortage of Td vaccine in the United States, there is **no** shortage of Td vaccine in Massachusetts due to the supply that the University of Massachusetts Biologic Laboratories manufactures for use in the Commonwealth.

Information on the prevention of tetanus can be found in the American Academy of Pediatrics' *Red Book 2000: Report of the Committee on Infectious Diseases, 25th Edition* and also in MDPH's *Guide to Surveillance and Reporting*, and *Mandell, Douglas, and Bennett's Principles and Practices of Infectious Diseases* (Volume II, pages 2537-2543). If you have any questions on tetanus or appropriate treatment, please call the Massachusetts Immunization Program (MIP) at (617)983-6800 or toll free at (888)658-2850.

Refugee and Immigrant Health

Refugees in Western Massachusetts

The Western Massachusetts counties of Hampden, Hampshire, Berkshire, and Franklin were the destination for over 2,100 refugees during the four years 1997-2000. This represents nearly one-quarter of all resettlement in the Commonwealth. Although refugees came from 23 different countries, 87% were from the former Soviet Union and 9% from the former Yugoslavia, including Kosovo. Previous to 1997, most refugees resettled in this area were from Southeast Asia.

While refugees initially resettled in 28 cities and towns, nearly 65% resettled in Westfield or West Springfield and another 20% in Chicopee or Springfield. The area voluntary agencies (VOLAGs) resettling refugees are Jewish Family Services of Springfield, Jewish Federation of the Berkshires and Lutheran Social Services, which also manages resettlement for Episcopal Migration Ministries.

Language and cultural differences can be barriers to established services for newly arrived refugees. Over time, local collaborations have developed to determine and address community needs and to form organizational linkages. Some of these are described below.

Two of the four Community Health Network Areas (CHNAs) in the region have worked on refugee-specific issues. In April 2001, over 60 people attended a forum on medical interpreting and advocacy sponsored by the Greater Springfield CHNA, which has had a language access initiative since 1999. The Westfield CHNA has been actively involved in the Westfield Russian-Ukrainian Planning Group's Health Committee.

The Westfield Russian-Ukrainian Planning Group includes members from local and state governments, refugee mutual assistance associations, community-based organizations, resettlement agencies, and health providers. Committees on housing, education, health, families/parenting and cultural events have worked more intensively in these areas. Currently, the health committee is developing a bilingual English/Russian service directory.

Through the leadership of the Massachusetts Office for Refugees and Immigrants, mainstream and refugee organizations in Western Massachusetts have come together to form the Western Massachusetts Newcomer Resettlement Initiative. The goal is to share existing local networks and resources and to develop effective strategies to support successful integration of newcomer families into the Springfield area. The Initiative hopes to create a "seamless web" of services to support the successful long-term integration of newcomer families and communities; increase local awareness of refugee and immigrant communities, their need to obtain long-term self-sufficiency and their potential contribution to local communities; share existing resources and bring additional resources to support newcomer integration; and develop a model of collaboration that might be replicated locally or nationally.

The Refugee Advocacy Group on Domestic Violence meets monthly, also bringing together diverse community groups. Activities have included workshops on Russian, Bosnian, and Vietnamese communities and development of a protocol for collaboration between police and newcomers.

The Refugee and Immigrant Health Program has five staff based at the Northampton DPH regional office. As regional coordinator, Magda Ahmed supervises community outreach educators and works to ensure that refugees receive appropriate health services related to initial health assessment, special medical needs, tuberculosis testing and treatment, and primary care. She works closely with local health departments and health providers. Four bilingual, bicultural outreach educators function as resources to both refugees and providers. Halida Begovic works with Bosnian refugees, Duong Chu with Vietnamese, and Svetlana Melnichuk and Oksana Posnik with Ukrainian and Russian-speaking communities.

Persons interested in participating in any of the initiatives or additional information may contact Magda Ahmed at 413-586-7525. Information on the Western Massachusetts Newcomer Resettlement Initiative is available from the Office for Refugees and Immigrants at 617-727-7888.

Resource Corner

The Cultural Orientation Project www.culturalorientation.net

The Cultural Orientation Project is a web resource that was established to create linkages between overseas providers of cultural orientation training for refugees who will be resettled in the United States and for domestic resettlement programs. The site has general information that is valuable to a wide range of providers who see refugees, including an overview of the United States Refugee Resettlement Program and fact sheets with country and cultural information on specific refugee groups. For example, there is a recently prepared fact sheet on refugees from Sudan. The refugee related resource links are comprehensive and facilitate further exploration of refugee topics.

Cultural Orientation Trainers continued from page one

medical hold for treatment of active disease are "cleared" and the general sense among refugees is that they, therefore, do not have TB. Once in the U.S., refugees are tested for latent TB infection and, for many, a six to nine month treatment is recommended. It was agreed that a strategy overseas that lets refugees know that there will be additional testing for TB in the U.S. would be helpful in promoting understanding of public health activities. In turn, Boston-based staff were provided with a unique opportunity for updates on refugees being processed through posts in the Middle East.

Rifampin-PZA Alert!

Based on the new ATS/CDC Guidelines (MMWR 2000; 49:RR-6 i-51) on targeted testing and treatment of latent TB infection, the MDPH has promoted the use of two-months rifampin-PZA (2-RZ) as an alternative to 6 to 9 months of INH for many adult and adolescent patients. However, CDC has recently reported fatal and severe hepatotoxicity associated with the 2-RZ regimen (MMWR 2001; 50:289-293). In addition, three cases of hepatotoxicity in patients on this regimen have been reported in Massachusetts.

In response, the CDC is now asking state health departments to collect data on toxicity associated with all regimens for LTBI; since, it is unclear whether the rate of hepatotoxicity is greater than due to INH alone. Preliminary studies among HIV-infected patients did not show excessive toxicity and the same drugs have been routinely used for many years (together with ethambutol and INH) for active TB, with low (< 5%) toxicity. The recommended dose of PZA for LTBI (15-20 mg/kg) is less than the dose used routinely for active TB (20-30 mg/kg) because of concerns about drug tolerance.

While CDC and others investigate the issue further, we suggest the following:

1. Carefully analyze the risk-benefit for each patient who is tested and treated for LTBI so that only truly high-risk persons are tested and treated.
2. Carefully evaluate the pre-treatment history for hepatitis, chronic liver disease, and hepatitis risk factors, such as injecting drug use. Be sure that a qualified interpreter is available when needed. In patients at risk, screening for chronic hepatitis B and hepatitis C is warranted.
3. Baseline liver function tests are indicated for patients with known liver disease or any risk factors. Baseline liver functions on all LTBI patients receiving 2-RZ is an option under consideration in Massachusetts, but the relevance of baseline testing to hepatotoxicity and on patient acceptance of LTBI treatment is not as yet clear. If baseline liver function is abnormal, treatment of latent infection (with periodic biochemical monitoring) should proceed only when justified by the high risk of tuberculosis, as in immunocompromised persons.
4. Give clear, repeated messages to patients (and providers) on the need to stop therapy promptly with the onset of any new symptoms while on treatment. Continuation of the drugs after the onset of symptoms can lead to accelerated liver injury.
5. Provide close clinical monitoring during therapy. Neither the MDPH nor CDC is recommending *routine* biochemical monitoring, except for patients at increased risk for hepatotoxicity.

The new, shorter 2-RZ regimen has greatly increased the completion rate of treatment of LTBI, from 50-60% with 6-months INH to nearly 80% in one Massachusetts clinic where it has been used frequently. Unlike INH, there is no established age-related toxicity associated with RZ, so that it is potentially useful in older patients for whom treatment of LTBI is indicated.

Although MDPH and CDC are actively collecting data on toxicity with all LTBI regimens, there have been no changes in current recommendations. MDPH will keep you informed as toxicity data is collected and analyzed. As questions arise, please E-mail Dr. Nardell at edward.nardell@state.ma.us.

Save the dates

Regional TB Today Course

A Regional TB Today course will be held on September 12-14 at the J. Erick Jonsson Center of The National Academy of Sciences in Woods Hole, Massachusetts. This course is for physicians, nurses and program managers caring for patients with latent TB infection and TB disease or who are engaged in TB prevention and control activities. Applicants from the entire northeast region of the US are welcome.

Regional TB Update

The next Regional TB Update will be at the Lawrence General Hospital in Lawrence on Thursday, September 20, 2001.

2001 Satellite Courses

All Satellite courses will be held at the UMass Medical School Campus at the State Laboratory Institute in Jamaica Plain, MA. There is planning for multiple sites throughout the state. Contact Walt Lasota at (617) 983-6834 or walter.lasota@state.ma.us for more information on the satellite courses.

Flu & Pneumonia Immunization in Nursing Homes: August 24, 2001 from 1:00 PM to 3:30 PM ET. Sponsored by DHHS/ HCFA - Medicare.

Immunization Update 2001: September 20, 2001 from 9:00 AM to 11:30 AM and Noon to 2:30 PM EDT. Sponsored by CDC/ PHTN.

Vaccinations for International Travel: December 13, 2001 from noon to 3:30 PM EST. Sponsored by CDC/PHTN.

Antibiotics: Yesterday, Today & Tomorrow

October 17, 2001 from 8:00 AM to 4:00 PM at the Burlington Marriott in Burlington, MA. Contact Jacki Dooley at (617) 983-6559 or jacqueline.dooley@state.ma.us for more information.

CD UPDATE
Room 557
State Laboratory Institute
305 South Street
Boston, MA 02130

Bulk Rate
US Postage
PAID
Boston, MA
Permit No.
#55970

Return Service Requested

Salmonella Newport Infection continued from page 2

For the past 15 years salmonella infections were often thought to be particularly associated with consumption of improperly cooked chicken and egg products. However, in light of this investigation, MDPH recommends that physicians and health care providers consider other sources of exposure when diagnosing salmonella infections. Undercooked beef and raw milk may be important potential sources of salmonella infection, and they should be considered when taking case histories. This situation also provides the opportunity to emphasize the importance of handwashing to prevent infectious diseases and the prudent antibiotic use in humans and animals to curtail the emergence of multi-drug resistant infections.

COMMUNICABLE DISEASE UPDATE is a free quarterly publication of the Bureau of CommunicableDisease Control, Massachusetts Department of Public Health.

Howard K. Koh, MD, MPH, Commissioner

To subscribe, please call or email Jacqueline Dooley at (617) 983-6559 or jacqueline.dooley@state.ma.us

Bureau of Communicable Disease Control
Alfred DeMaria, Jr., MD, Assistant Commissioner
(617) 983-6550

HIV/AIDS Surveillance Program
(617) 983-6560

Division of Epidemiology and Immunization
Robert S. Goldstein, MPH, Director
Susan Lett, MD, MPH, Immunization Medical Director
Bela Matyas, MD, MPH, Epidemiology Medical Director
(617) 983-6800

Division of STD Prevention
Paul Etkind, DrPH, MPH, Director
(617) 983-6940

Refugee and Immigrant Health Program
Jennifer Cochran, MPH, Director
(617) 983-6560

Division of TB Prevention and Control
Sue Etkind, RN, MS, Director
(617) 983-6970

Managing Editor
Jacqueline Dooley
(617) 983-6559

Contributing Editors - Allison Hackbarth, MPH, Kathleen Hursen, RN, MS and Dan Church, MPH